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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,608	12/02/2003	Hiroynki Kometani	380-45	3708
23117 7590 08/04/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
SERGENT, RABON A				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
08/04/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/724,608

Applicant(s)

KOMETANI ET AL.

Examiner

Rabon Sergeant

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 23, 24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 23, 24 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/973,747.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 20, 23, 24, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markusch et al. ('892) in view of Hannah et al. ('659) and Hagio et al. ('104).

Markusch et al. disclose polyurethane compositions, suitable for use as two- or multiple component compositions, wherein the compositions are produced by reacting a polyisocyanate, including aromatic polyisocyanate prepolymers, with a polyether polyol, wherein a suitable catalyst is disclosed as being acid blocked 1,8-diazabicyclo (5,4,0) undecene-7. See abstract; column 2, lines 23+; column 3, lines 51+; column 4, lines 1-33; column 5, lines 23+; column 6; column 9, lines 11-15 and 58+; and column 10, lines 1 and 2.

3. Though Markusch et al. fail to provide additional disclosure concerning the selection of the blocking-acid species, Hannah et al. and Hagio et al. disclose suitable acids for the production of such acid-blocked catalysts that are considered to encompass those claimed by

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applicants. See column 4, line 65 through column 5, line 27 within Hannah et al. See column 3, lines 14-19 within Hagio et al. Accordingly, the position is taken that it would have been obvious to use virtually any acid, including unsaturated acids, that falls within the teachings of the secondary reference to block the catalyst of Markusch et al. One of ordinary skill would have reasonably expected both saturated and unsaturated acids to function as blocking agents for the amine catalysts.

4. Applicants' response of March 26, 2009 has been considered; however, the response is insufficient to overcome the prior art rejection. Firstly, applicants have argued that Markusch et al. teach the use of heat activated catalysts and, accordingly, Markusch et al. teach away from the use of acid blocked amines as a catalyst for a urethane-forming system curable at ambient temperature. In response, this argument is without merit, as there is no requirement within the claims requiring the composition to be ambient temperature curable. Secondly, applicants refer to the use of amine-terminated polyether within Markusch et al.; however, it is not seen that this issue is relevant to the instant claims, since the claims do not exclude the use of such components. Thirdly, applicants have argued that the composition of Markusch et al. is so designed that the viscosity increases immediately after mixing, whereas the sealant of the present invention is required to stay fluid for a while after the ingredients are mixed. In response, this argument is not commensurate in scope with the claims. There is absolutely no requirement within the claims that mandates that the sealant remains fluid for a while after the ingredients are mixed. Fourthly, despite applicants' arguments, the position is maintained, given the description of the reactants and utilities, that the use of the name, sealant, to the extent claimed, versus the name, adhesive, is insufficient to distinguish the claims from the prior art. The examiner

maintains that compositions of the type claimed inherently function as adhesives and adhesives of the type disclosed inherently function as sealants. Fifthly, as set forth within the previous Office action, though Hagio et al. has been removed as the primary reference due to the instant claiming of the polyether component, the examiner maintains that polyisocyanates, as understood within the art, encompass blocked isocyanates. As evidence of this, applicants' attention is directed to column 2, lines 33-35 of U.S. Patent 5,494,994, wherein it is stated, "Suitable polyisocyanates include blocked polyisocyanates ... and/or polyisocyanates which are free from blocking agents." As previously set forth, even if blocking agents are excluded, it is not seen that such an exclusion serves to overcome the prior art that utilizes blocked isocyanates, since one would reasonably expect from the teachings of the references and the general state of the art that the disclosed catalysts would catalyze the reaction of virtually any polyisocyanate-polyol reactant mixture. Applicants respond that the examiner's view is totally incorrect, because the disclosed catalysts cannot catalyze the reaction of the polyisocyanates with a polyol at ambient temperature. In response, as aforementioned, there is no requirement within the claims that mandates curing at ambient temperature; therefore, it is not seen that applicants' remark is relevant to the issue at hand. Lastly, the examiner has considered applicants' examples, and the position is maintained that applicants have not provided showings commensurate in scope with the claims to rebut the *prima facie* case of obviousness. Despite applicants' remarks and amendments, applicants' claims and examples are not commensurate in scope in terms of reactants, catalyst species, acid species, quantities of reactants, quantities of catalyst, and ratios of catalyst to acid. It has been held that evidence of unexpected results, must pertain to the full extent of the subject matter being claimed. *In re Ackermann*, 170 USPQ 340;

In re Chupp, 2 USPQ2d 1437; *In re Murch*, 175 USPQ 89. Accordingly, to overcome a *prima facie* case of obviousness, the claims must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197 USPQ 227. Furthermore, it has been held that a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin*, 161 USPQ 288; *In re Kulling*, 14 USPQ2d 1056. For example, it is noted that applicants' results in Table 4 are derived from a specific prepolymer and polyol composition set forth within Table 3; however, applicants' claims, as well as the prior art, are not so limited. Since applicants' results are directly related to reactivity profiles, it stands to reason that applicants' results would likely not be the same for a different prepolymer having a different reactivity or a different polyether having hydroxyl groups of a different reactivity. Accordingly, applicants' results fail to meet the aforementioned requirements. In summation, the position is taken that the evidence of obviousness outweighs the evidence of non-obviousness.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

/Rabon Sergent/

Primary Examiner, Art Unit 1796

R. Sergent

July 31, 2009